Brian Schweitzer, Governor

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# ADMINISTRATIVE AMENDMENT TO MONTANA AIR QUALITY PERMIT

Date of Mailing: November 15, 2012

Name of Applicant: Omimex Canada, Ltd

Source: Natural Gas Compressor Station

Location: SW1/4 of the NW1/4 of Section 4, Township 34 North, Range 5 West, Glacier County, Montana

<u>Proposed Action</u>: The Department of Environmental Quality (Department) proposes to issue an Administrative Amendment, with conditions, to the above-named permittee. The permit will be assigned #2737-07. The permittee may appeal the Department's decision to the Board of Environmental Review (Board). A request for hearing must be filed by November 30, 2012. This permit shall become final on December 1, 2012, unless the Board orders a stay on the permit.

Proposed Conditions: See attached.

<u>Procedures for Appeal</u>: The permittee may request a hearing before the Board. Any appeal must be filed before the final date stated above. The request for hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, Montana 59620.

For the Department,

Julie Merkel

Air Permitting Supervisor

Air Resources Management Bureau

Julio A Merkl

(406) 444-3626

Tashia Love

Environmental Science Specialist

Air Resources Management Bureau

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JM:TL Enclosure

## MONTANA AIR QUALITY PERMIT

Issued To: Omimex Canada, Ltd. MAQP #2737-07

Cut Bank Field Station, 015

Administrative Amendment (AA) Request

5608 Malvey, Penthouse Suite Received: 10/16/2012 Fort Worth, TX 76107 Department's Decision on

Department's Decision on AA: November

15, 2012 Permit Final: AFS: #035-0006

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to the Omimex Canada, Ltd. (Omimex) - Cut Bank Field, Station 015 pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

#### Section I: Permitted Facilities

#### A. Plant Location

This permit is for the operation of a natural gas compressor station, known as the Cut Bank Field, Station 015 Compressor Station, located in the SW¼ of the NW¼ of Section 4, Township 34 North, Range 5 West, Glacier County, Montana. A complete list of the permitted equipment is contained in Section I.A. of the permit analysis.

#### B. Current Permit Action

On October 16, 2012, the Department of Environmental Quality – Air Resources Management Bureau (Department) received a deminimis request for the addition of a 80 thousand British thermal unit per hour (MBtu/hr) Little Giant Heater to the MAQP.

## Section II: Conditions and Limitations

#### A. Emission Limitations

1. Emissions from the 360 brake-horsepower (bhp) White Superior compressor engine shall not exceed the following (ARM 17.8.752):

Oxides of Nitrogen  $(NO_X^{-1})$  8.73 pounds per hour (lb/hr)

Carbon Monoxide (CO) 1.59 lb/hr Volatile Organic Compounds (VOC) 3.97 lb/hr

- 2. Omimex shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed or altered after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 3. Omimex shall not cause or authorize emissions to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

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<sup>&</sup>lt;sup>1</sup>NO<sub>X</sub> reported as NO<sub>2</sub>.

- 4. Omimex shall treat all unpaved portions of the access roads, parking lots, and general plant area with fresh water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.3 (ARM 17.8.752).
- 5. Omimex shall operate all equipment as designed to provide the maximum control of air pollutants (ARM 17.8.752).
- 6. Omimex shall comply with all applicable standards and limitations, reporting, recordkeeping and notification requirements contained in 40 Code of Federal Regulation (CFR) 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, and 40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (ARM 17.8.340; ARM 18.7.342; 40 CFR 63, Subpart ZZZZ; and 40 CFR 60, Subpart JJJJ).

# B. Testing Requirements

- 1. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 2. The Department may require testing (ARM 17.8.105).

# C. Operational Reporting Requirements

- 1. Omimex shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in the permit analysis.
  - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units as required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
- 2. Omimex shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include the *addition of a new emission unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
- 3. All records compiled in accordance with this permit must be maintained by Omimex as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

#### Section III: General Conditions

- A. Inspection Omimex shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emissions Monitoring Systems (CEMS), Continuous Emissions Rate Monitoring System (CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if the recipient fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Omimex of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740 *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Air Quality Operation Fees Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Omimex may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

# Montana Air Quality Permit (MAQP) Analysis Omimex Canada, Ltd. Cut Bank Field, Station 015 MAQP #2737-07

# I. Introduction/Process Description

Omimex Canada, Ltd. (Omimex) - Cut Bank Field, Station 015 operates a compressor station and associated equipment, located in the SW¼ of the NW¼ of Section 4, Township 34 North, Range 5 West, Glacier County, Montana.

# A. Permitted Equipment

The facility includes the following equipment:

One 360 brake-horsepower (bhp) White Superior compressor engine (installed 1983) One 175-thousand British thermal units per hour (MBtu/hour) Latoka dehydrator (reboiler)

One 80MBtu /hr Little Giant heater

#### B. Source Description

The complex has two primary purposes. The first purpose is to boost the field gas to the natural gas transmission system. This initial compression of the gas is accomplished with a 360-bhp White Superior compressor engine.

The second purpose of the complex is to "dry" the gas as it is being processed. The gas contains some moisture, which must be removed from the system prior to being sent into the transmission system. This is accomplished with a 175-MBtu/hr Latoka dehydrator, also commonly called a reboiler or glycol unit.

The gas is treated with a glycol solution, which absorbs the water in the gas stream. The glycol is then heated to about 300 degrees Fahrenheit (°F) in order to drive off the water in the form of steam. Burning natural gas in the dehydrator reboiler generates the heat that is necessary for this.

## C. Permit History

Montana Power Company - Cut Bank Field, Station 015 (Montana Power - Station 015) was issued **MAQP #2737-00** for the operation of their compressor station and associated equipment, located in the SW¼ of the NW¼ of Section 4, Township 34 North, Range 5 West, Glacier County near Cut Bank, Montana. The station was identified as the Cut Bank Field, Station 015. On April 13, 1993, MAQP #2737-00 became final.

A Best Available Control Technology (BACT) determination was required for the 360-bhp White Superior compressor engine, since it was not operating at the same location prior to March 16, 1979.

Based on the BACT analysis for the 360-bhp White Superior compressor engine, the Department of Environmental Quality (Department) determined that BACT for this source was proper operation of the engine to maintain compliance with the emission limitations in Section II.A.1 of the permit.

Montana Power - Station 015 requested a modification to MAQP #2737-00 so the Department could revise the emission limitation units from grams per brake horsepower-hour (g/bhp-hr) to pounds/hour (lb/hr). Rather than limit the engines to a g/bhp-hr limit, an hourly emission limit allowed operational flexibility. The revision allowed Montana Power - Station 015 to account for varying parameters such as engine revolutions per minute (rpm), operating load (bhp), ambient air temperature, gas temperature, site, elevation, fuel gas quality, Air/Fuel Ratio (AFR), field gas conditions, etc.

In addition, to clarify nitrogen oxides  $(NO_x)$  mass emission calculations,  $NO_x$  emission limitations were identified as nitrogen dioxide  $(NO_2)$ . Furthermore, the July 30, 1993, request corrected the derating information to use a more accurate altitude derating curve. **MAQP #2737-01** replaced MAQP #2737-00. On February 18, 1994, MAQP #2737-01 became final.

As part of MAQP #2737-02, the Department removed the testing requirements for the 360-bhp White Superior compressor engine. Removing the testing requirements for this engine was consistent with the Department's testing guidance. The 360-bhp White Superior compressor engine was last tested and demonstrated compliance on October 7, 1997. The rule references were updated and the permitting language was changed to reflect the format used for writing permits at the time of permit issuance. MAQP #2737-02 replaced MAQP #2737-01. On November 15, 1998, MAQP #2737-02 became final.

The Montana Power Company requested a name change to the Montana Power Gas Company. The appropriate references in the permit were changed to reflect the name change. **MAQP #2737-03** replaced MAQP #2737-02. On March 14, 1999, MAQP #2737-03 became final.

On January 22, 2002, the Department received a notice of corporate merger and name change from the Montana Power Gas Company to PanCanadian Energy Resources, Inc (PanCanadian). The letter notified the Department that Montana Power Gas Company, Xeno, Inc., and Entech Gas Ventures, Inc. merged into North American Resources Company (NARCO) as of January 1, 2002. The letter also stated that at the same time, NARCO changed its corporate name to PanCanadian. In addition, on April 18, 2002, the Department received a letter from PanCanadian that requested a name change from PanCanadian to EnCana Energy Resources, Inc. The current permit action transferred the permit from Montana Power Gas Company to EnCana Energy Resources, Inc. (EnCana) and updated the permit with current permit language and rule references used by the Department. MAQP #2737-04 replaced MAQP #2737-03. On August 8, 2002, MAQP #2737-04 became final.

On June 5, 2003, the Department received a letter from EnCana requesting the Department change the corporate name on MAQP #2737-04 from EnCana to Encana Gathering Services (USA), Inc (EnCana Gathering). This permit action changed the corporate name from EnCana to EnCana Gathering and updated the permit to reflect current permit language and rule references used by the Department. MAQP #2737-05 replaced MAQP #2737-04.

On March 5, 2004, the Department received a letter from Omimex requesting the Department change the corporate name on MAQP #2737-05 from EnCana Gathering to Omimex. This permitting action changed the corporate name and updated the permit to reflect current permit language and rule references. MAQP #2737-06 replaced MAQP #2737-05.

#### D. Current Permit Action

On October 16, 2012, the Department received a deminis request for the addition of a 80-MBtu/hr Little Giant Heater to the permit. **MAQP** #2737-07 replaces MAQP #2737-06.

#### E. Additional Information

Additional information, such as applicable rules and regulations, BACT/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the permit analysis associated with each change to the permit.

# II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for the locations of complete copies of all applicable rule or regulation or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
  - 1. <u>ARM 17.8.101 Definitions</u>. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment( including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
  - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Omimex shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. <u>ARM 17.8.110 Malfunctions</u>. The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
  - 1. ARM 17.8.204 Ambient Air Monitoring
  - 2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
  - 3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
  - 4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
  - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
  - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
  - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
  - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
  - 9. ARM 17.8.222 Ambient Air Quality Standard for Lead
  - 10. ARM 17.8.223 Ambient Air Quality Standards for PM<sub>10</sub>

Omimex must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
  - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
  - 2. <u>ARM 17.8.308 Particulate Matter, Airborne.</u> (1) This rule requires an opacity limitation of less than 20% for all fugitive emissions sources and that reasonable precautions are taken to control emissions of airborne particulate. (2) Under this rule, Omimex shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
  - 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
  - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
  - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions–Sulfur in Fuel</u>. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel, containing sulfur compounds, in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. Omimex uses natural gas, which meets this limitation.

- 6. ARM 17.8.340 Standards of Performance for New Stationary Sources. The owner or operator of any stationary source or modification, as defined and applied in 40 Code of Federal Regulations (CFR) Part 60, New Source Performance Standards (NSPS), shall comply with the standards and provisions of 40 CFR Part 60.
  - a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
  - b. The Omimex facility is not an NSPS affected source because it does not meet any of the definitions of a natural gas processing plant, as defined in 40 CFR Part 60, Subpart KKK, or any other subpart under 40 CFR Part 60, as the facility was constructed prior to January 20, 1984.
  - c. 40 CFR 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The provisions of this subpart are applicable to owners and operators of stationary spark ignition internal combustion engines (SI ICE) that commence construction after June 12, 2006, where the engines are less than 500 brake-horsepower (bhp) and are manufactured on or after July 1, 2008. For the purposes of this subpart, the date that construction commences is the date the engine is ordered. The SI ICE engines associated with MAQP #2737-07 that are less than 500 bhp are potentially subject to the provisions of this subpart depending upon the date of construction and manufacture.
- 7. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source</u>
  <u>Categories</u>. The source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as listed below:
  - a. <u>40 CFR 63, Subpart A General Provisions</u> apply to all equipment or facilities subject to an New Emissions Standard for Hazardous Air Pollutants (NESHAP) Subpart as listed below:
  - 40 CFR 63, Subpart HH National Emission Standards for Hazardous Air b. Pollutants From Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63 shall comply with the applicable provisions of 40 CFR 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR 63, Subpart HH requirements, certain criteria must be met. First, a facility must either process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. Second, the facility must also contain an affected source as specified in paragraphs (b)(1) or (b)(2) of 40 CFR 63, Subpart HH. Finally if the criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR 63, Subpart HH. The facility can be either a major or area source of HAPs. Omimex is potentially subject to Subpart HH.
  - c. 40 CFR 63, Subpart HHH National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no

- local distribution company), and that are major sources of hazardous air pollutant (HAP) emissions as defined in 40 CFR Part 63.1271. Omimex is not a major source of HAP emissions; therefore, this subpart does not apply.
- d. 40 CFR 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines (RICE). The provisions of Subpart ZZZZ established national emission and operating limitations for HAPs emitted from stationary RICE located at major and area sources of HAP emissions, except RICE being tested at a stationary test cell/stand. This subpart also establishes requirements to demonstrate initial and continuous compliance established emission and operating limitations. As an area source of HAPs the RICE operated under MAQP #2737-07 are potentially subject to this subpart.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
  - 1. ARM 17.8.504 Air Quality Permit Application Fees. Omimex shall submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee is not required for the current permit action because the action is considered an administrative permit change.
  - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated amount of air pollutants emitted during the previous calendar year.
  - An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, as described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions which prorate the required fee amount.
- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
  - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. Omimex has a PTE greater than 25 tons per year (tpy) of NO<sub>X</sub>; therefore, an air quality permit is required.
  - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

- 4. <u>ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis</u>

  <u>Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
- 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application
  Requirements. (1) This rule requires that a permit application be submitted prior
  to installation, alteration or use of a source. Omimex was not required to submit
  an application for the current permit action because the change is considered
  administrative. (7) This rule requires that the applicant notify the public by
  means of legal publication in a newspaper of general circulation in the area
  affected by the application for a permit. An affidavit of publication of public
  notice was not required for the current permit action because the permit change is
  considered an administrative permit change.
- 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. A BACT analysis was not required for the current permit action because there are no new or altered sources permitted as a part of this action.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Statutes and Rules</u>. This rule states that nothing in the permit shall be construed as relieving Omimex of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. <u>ARM 17.8.765 Transfer of Permit</u>. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
  - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
  - ARM 17.8.818 Review of Major Stationary Sources and Major Modification— Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and does not have a PTE greater than 250 tons per year (tpy) (excluding fugitive emissions) of any air pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
  - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
    - a. PTE > 100 tpy of any pollutant.
    - b. PTE > 10 tpy of any one HAP, or PTE > 25 tpy of a combination of all HAPs, or lesser quantity as the Department may establish by rule.
    - c. PTE > 70 tpy of  $PM_{10}$  in a serious  $PM_{10}$  nonattainment area.
  - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2737-07 for Omimex, the following conclusions were made:
    - a. The facility's PTE is less than 100 tpy for all criteria pollutants.

- b. The facility's PTE is less than 10 tpy of any one HAP and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious  $PM_{10}$  nonattainment area.
- d. This facility is potentially subject to current NESHAP standards 40 CFR 63, Subpart ZZZZ and 40 CFR 63, Subpart HH.
- e. This facility is potentially subject to NSPS standard (40 CFR 60, Subpart JJJJ)
- f. This source is not a Title IV affected source, nor a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Based on the above facts, Omimex is not subject to the Title V Operating Permit Program.

## III. BACT Determination

A BACT determination is required for each new or altered source. Omimex shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. A BACT analysis is not required for the current permit action, because the change is considered an administrative amendment.

# IV. Emission Inventory

		Ton/Year					
	PM	$PM_{10}$	$SO_X$	$NO_X$	VOC	CO	
360 White Superior Latoka Dehydrator 80 MBtu/hr Little Giant Heater	0.12 0.00 0.002	0.12 0.00 0.002	0.01 0.00 0.00	34.38 0.08 0.04	17.39 0.01 0.00	6.96 0.02 0.01	
Total Altitude deration (For Information Only)	0.122	0.122	0.01	34.50	17.40	6.99	

Altitude of engine: 3850 ft (90% as per performance curve, SC-8 of 11-23-56, submitted July 30, 1993, by MPC)

Calculation: 360 bhp \* 0.90 = 324.0 bhp

#### **360 White Superior**

Brake Horsepower: 324 bhp Hours of operation: 8760 hr/yr

PM Emissions

Emission Factor: 10.0 lb/10^6 ft^3 {2-02-002-02, AFSSCC page 32}

Control Efficiency: 0.0%

Fuel Consumption: 8500 Btu/bhp-hr {Maximum Design}

Calculations:  $8500 \text{ Btu/bhp-hr} * 0.001 \text{ ft}^3/\text{Btu} * 324 \text{ bhp} * 8760 \text{ hr/yr} = 24,125,040 \text{ ft}^3/\text{yr}$ 

 $24,125,040 \text{ ft}^3/\text{yr} * 10 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.12 \text{ ton/yr}$ 

PM<sub>10</sub> Emissions

Emission Factor: 10.0 lb/10^6 ft^3 {2-02-002-02, AFSSCC page 32}

Control Efficiency: 0.0%

Fuel Consumption: 8500 Btu/bhp-hr {Maximum Design}

Calculations: 8500 Btu/bhp-hr \* 0.001 ft^3/Btu \* 324 bhp \* 8760 hr/yr = 24,125,040 ft^3/yr

 $24,125,040 \text{ ft}^3/\text{yr} * 10 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.12 \text{ ton/yr}$ 

NO<sub>X</sub> Emissions

Emission factor: 11.00 gram/bhp-hr {Based on BACT determination}
Calculations: 11.00 gram/bhp-hr \* 324 bhp \* 0.002205 lb/gram = 7.85 lb/hr

7.85 lb/hr \* 8760 hr/yr / 2000 = 34.38 ton/yr

**VOC Emissions** 

Emission factor: 5.00 gram/bhp-hr {Based on BACT determination} Calculations: 5.00 gram/bhp-hr \* 324 bhp \* 0.002205 lb/gram = 3.97 lb/hr

3.97 lb/hr \* 8760 hr/yr / 2000 = 17.39 ton/yr

CO Emissions

Emission factor: 2.00 gram/bhp-hr {Based on BACT determination} Calculations: 2.00 gram/bhp-hr \* 324 bhp \* 0.002205 lb/gram = 1.59 lb/hr

1.59 lb/hr \* 8760 hr/yr / 2000 = 6.96 ton/yr

SO<sub>x</sub> Emissions

Emission factor: 0.002 gram/bhp-hr {AP-42, Table 3.2-1.9/85}

Calculations: 0.002 gram/bhp-hr \* 324 bhp \* 0.002205 lb/gram = 0.002 lb/hr

0.002 lb/hr \* 8760 hr/yr / 2000 = 0.01 ton/yr

#### Latoka Dehydrator

PM Emissions

Emission Factor: 5.00 lb/10^6 ft^3 {AP-42, 1.4-1}

Control Efficiency: 0.00%

Fuel Consumption: 1.53 10^6 ft^3/yr {Information from company}

Calculations:  $1.53 * 10^6 \text{ ft}^3/\text{yr} * 5 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$ 

PM<sub>10</sub> Emissions

Emission Factor: 5.00 lb/10<sup>6</sup> ft<sup>3</sup> {AP-42, 1.4-1}

Control Efficiency: 0.00%

Fuel Consumption: 1.53 10<sup>6</sup> ft<sup>3</sup>/yr {Information from company}

Calculations:  $1.53 * 10^6 \text{ ft}^3/\text{yr} * 5 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$ 

NO<sub>x</sub> Emissions

Emission Factor: 100.00 lb/10<sup>6</sup> ft<sup>3</sup> {AP-42, 1.4-1}

Control Efficiency: 0.00%

Fuel Consumption: 1.53 10<sup>6</sup> ft<sup>3</sup>/yr {Information from company}

Calculations:  $1.53 * 10^6 \text{ ft}^3/\text{yr} * 100 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.08 \text{ ton/yr}$ 

**VOC Emissions** 

Emission Factor: 8.00 lb/10^6 ft^3 {AP-42, 1.4-1}

Control Efficiency: 0.00%

Fuel Consumption: 1.53 10<sup>6</sup> ft<sup>3</sup>/yr {Information from company}

Calculations:  $1.53 * 10^6 \text{ ft}^3/\text{yr} * 8 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$ 

CO Emissions

Emission Factor: 20.00 lb/10<sup>6</sup> ft<sup>3</sup> {AP-42, 1.4-1}

Control Efficiency: 0.00%

Fuel Consumption: 1.53 10<sup>6</sup> ft<sup>3</sup>/yr {Information from company}

Calculations:  $1.53 * 10^6 \text{ ft}^3/\text{yr} * 20 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.02 \text{ ton/yr}$ 

SO<sub>X</sub> Emissions

Emission Factor: 0.60 lb/10^6 ft^3 {AP-42, 1.4-1}

Control Efficiency: 0.00%

Fuel Consumption: 1.53 10^6 ft^3/yr {Information from company}

Calculations:  $1.53 * 10^6 \text{ ft}^3/\text{yr} * 0.6 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$ 

## 80 MBtu/hr Little Giant Heater (80 MBtu converted to .08 MMBtu for Emission Inventory calculations)

Fuel Consumption: 0.08 MMBtu/hr {Information from Company}

Hours of operation: 8,760 hr/yr

**PM** Emissions

Emission Factor: 7.6 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}

Control Efficiency: 0.0%

Calculations: 0.08 MMBtu/hr \* 0.001 MMScf/MMBtu \* 8,760 hr/yr = .7008 MMScf/yr

.7008 MMScf/yr \* 7.6 lb/MMScf \* 0.0005 ton/lb = 0.002 ton/yr

PM<sub>10</sub> Emissions

Emission Factor: 7.6 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}

Control Efficiency: 0.0%

Calculations:  $0.08 \; MMBtu/hr * 0.001 \; MMScf/MMBtu * 8,760 \; hr/yr = .7008 \; MMScf/yr$ 

.7008 MMScf/yr \* 7.6 lb/MMScf \* 0.0005 ton/lb = 0.002 ton/yr

NO<sub>x</sub> Emissions

Emission Factor: 100 lb/MMScf {AP-42, Chapter 1, Table 1.4-1, 7/98}

Control Efficiency: 0.0%

 $Calculations: 0.08 \ MMBtu/hr*0.001 \ MMScf/MMBtu*8,760 \ hr/yr=.7008 \ MMScf/yr$ 

.7008 MMScf/yr \* 100 lb/MMScf \* 0.0005 ton/lb = 0.04 ton/yr

**VOC Emissions** 

Emission Factor: 5.5 lb/MMScf {AP-42, Chapter 1, Table 1.4-2, 7/98}

Control Efficiency: 0.0%

 $Calculations: \\ 0.08 \text{ MMBtu/hr}*0.001 \text{ MMScf/MMBtu}*8,760 \text{ hr/yr} = .7008 \text{ MMScf/yr}$ 

.7008 MMScf/yr \* 5.5 lb/MMScf \* 0.0005 ton/lb = 0.00 ton/yr

CO Emissions

Emission Factor: 40 lb/MMScf {AP-42, Chapter 1, Table 1.4-1, 7/98}

Control Efficiency: 0.0%

 $Calculations: \\ 0.08 \text{ MMBtu/hr}*0.001 \text{ MMScf/MMBtu}*8,760 \text{ hr/yr} = .7008 \text{ MMScf/yr}$ 

.7008 MMScf/yr \* 40 lb/MMScf \* 0.0005 ton/lb = 0.01 ton/yr

SO<sub>2</sub> Emissions

Emission Factor: 0.6 lb/MMBtu {AP-42, Chapter 1, Table 1.4-2, 7/98}

Control Efficiency: 0.0%

 $Calculations: \\ 0.08 \ MMBtu/hr * 0.001 \ MMScf/MMBtu * 8,760 \ hr/yr = .7008 \ MMScf/yr$ 

.7008 MMScf/yr \* 0.6 lb/MMScf \* 0.0005 ton/lb = 0.00 ton/yr

## V. Existing Air Quality

MAQP #2737-07 allows the continued operation of a natural gas compressor station, known as the Cut Bank Field, Station 015 Compressor Station, located in the SW ¼ of the NW ¼ of Section 4, Township 34 North, Range 5 West, Glacier County, Montana. The Department believes that the amount of controlled emissions generated by this project will not exceed any set ambient air quality standard.

## VI. Ambient Air Impact Analysis

The Department determined that the impacts from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

# VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real
Λ		property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of
		property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If
	Λ	no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state
		interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact,
	Λ	investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property
	Λ	in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or
	Λ	flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking
		of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response
		to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is
		checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

# VIII. Environmental Assessment

An Environmental Assessment was not required for the current permitting action because the changed is considered administrative.

Permit Analysis Prepared By: Tashia Love

Date: October 23, 2012